Journal of the Indian Chemical Society
Vol. IV. 1927

INDEX OF AUTHORS.

PAGE

ADHIKARI, Nadia Bihari.—See (Sir) Prafulla Chandra RAY.
ALI, Mohammad.—See S. S. Bhatnagar.

BARAT, Chittaranjan.—See Hemendra Kumar SEN.
BARAT, Kali Krishna and Sikhibhusan DUTT.—A theory of colour on the basis of molecular strain. Part III. Decomposition of dyes by the influence of solar radiation. 265

BASU, Jyoti Kanta.—See Jnanendra Nath MUKHERJEE.
BASU, Kalipada.—See Jnanendra Chandra GHOSH.
BASU, S. K. and M. LAKSHMANAN.—Protective action of Rochelle salt on cupric oxide sol. Part I. ... 29
BHAT, Yeswant Narayan.—See Kuverji Gosai NAIK.
BHATNAGAR, S. S., H. B. DUNNICLIFF and Mohammad ALI.—The action of light on concentrated aqueous solution of ammonium thiocyanate. 22
BHATNAGAR, S. S., N. A. YAJNIK and Vasu Dev ZADOO.—Studies in "photo-sols". Part I. 209
BHATTACHARYA, A. K. and N. R. DHAR.—Zinc oxide as a general sensitiser for photochemical reactions. ... 298
BHATTACHARYA, Asutosh.—See Prafulla Chandra MITTER.
BISWAS, S. C.—Significance of Minimum ionising potentials of gases in relation to their molecular volumes. ... 441
BOSE, Prafulla Kumar.—Benzidine rearrangement in the heterocyclic series. Part I. 331
BOSE, Prafulla Kumar and Dhirendra Chandra RAY-CHOWDHURY.—Thiodiazines. Part V. 257
—Studies in the thiosemicarbazone series. 84
BOSE, Umaprasanna.—See Hemendra Kumar SEN.
BOSE-RAY, Kshitish Chandra.—See (Sir) Prafulla Chandra RAY.

CHAKRAVARTI, Gopal Chandra and Jogendra Mohan SAHA.—Interaction of mercaptans with phthalic anhydride and phthalyl chloride. 141

CHAKRAVARTY, Kshitindra Mohan and Jnanendra Chandra GHOSH.—Catalytic formation of methane from carbon monoxide and hydrogen. Part III. A study of various catalysts. 431

CHAUDHURY, Subodh Gobinda.—See Jnanendra Nath MUKHERJEE.

DAS, Bhagwan.—See S. KRISHNA.

DATTA, Rasik Lal and Phuldeo Sahay VARMA.—Replacement of sulphonic groups by nitro groups in aromatic amino-compounds. 321

DAS-GUPTA, Jyotsnalal.—See Phuldeo Sahay VARMA.

DE, Ananta Kumar and Jnanendra Nath RAY.—The constitution of vasicine. Part I. A synthesis of 2-propyl-(*iso*propyl)-4-oxyquinazoline. 541

DE, Pran Kumar and Anukul Chandra SIRCAR.—On the reactivity of *o*-diketonic groups placed between two nitrogen atoms. 531

DE, Satish Chandra.—
Researches in the thiazole series. Part I. Action of hydrochloric acid on allyl thiosemicarbazide. ... 6
—Part II. Condensation products from methyl ethyl ketone and *o*-hydroxy aldehydes. 137
—Pyrylium salts and *spiro*-dipyrans. Part I. Condensation products from *o*-hydroxyaldehydes and α-alkylated β-ketonic esters. 23
—Action of hydrazides. Part I. Synthesis of triazines from aminoguanidine and diketones. 183

DEY, Biman Bihari and Panchapakesa KRISHNAMURTHI.—The nitration of coumarin. 197

DEY, Biman Bihari and Tiruvenkata Rajendra SESHADRI.—6-Hydroxyquinolyl-5-β-acrylic acids(*cis*- and *trans*-) and their derivatives. 189

DHAR, N. R.—Adsorption of ions and of sols at interfaces and its application to certain problems of colloid chemistry. 173
—See also A. K. BHATTACHARYA.

PAGE

DHAR, Prasanta Ratan and Sikhibhusan DUTT.—Dyes derived from itaconic acid. 247
—Dyes derived from citraconic acid. 253
DUNNICLIFF, H. B.—See S. S. BHATNAGAR.
DUTT, Pavitra Kumar.—See Edith Mary Langman.
DUTT, Sikhibhusan.—A theory of colour on the basis of molecular strain. Part II. A general exposition of the theory. 99
GHOSE, Tarak Prasad.—Vasicine—an alkaloid present in *Adhatoda vasica*, Nees. Part II. 1
GHOSH, Jnanendra Chandra and Kalipada BASU.—Photobromination of *m*-nitrobenzylidene malonic ester. Part I. 375
GHOSH, Jnanendra Chandra and Bhupendra Nath MITTER.—Extinction coefficients of mixtures of uranyl nitrate and organic acids in the ultra-violet, as experimental evidence in favour of the formation of unstable intermediate compounds. 353
GHOSH, Jnanendra Chandra and Jadulal MUKHERJEE.—Photochemical oxidation of leuco-malachite green by means of uranyl nitrate in monochloracetic acid solution. 343
GHOSH, Jnanendra Chandra.—See Rukmini Mohan PURAKAYASTHA.
GHOSH, R. N.—The dependence of ionisation potential of elements on the electronic structure. 423
GHOSH, Sisir Kumar.—See Hemendra Kumar SEN.
GHOSH, Tejendra Nath.—See Prafulla Chandra GUHA.
GUHA, Prafulla Chandra and Tejendra Nath GHOSH.—*o*-Aminophenyl hydrazine and some interesting heterocyclic compounds derived from it. Part III. Lengthened *o*-di-derivatives of benzene and their ring-closure. 561
GUHA, Prafulla Chandra and Sunil Chandra GUHA.—Action of different ring-closing agents upen 4-R-thiosemicarbazide-dithiocarboxylates : Formation of different types of thiobiazoles and oxybiazoles. 161
—Formation of heterocyclic compounds. Part I. Action

PAGE

of methyldithiocarbazinate upon *o*-diketones and their monoximes and upon chlorides and esters of dibasic acids. 239

GUHA, Prafulla Chandra and Pratul Chandra SEN.—Action of urea upon thiosemicarbazides : Simultaneous formation of thiol-keto-triazoles, amino-ketothiodiazoles, endoxytriazole and aminothiol-triazoles. ... 43

GUHA, Sunil Chandra.—See Prafulla Chandra GUHA.

HAMID, Mohammed Abdul.—The cyclic processes involved in the manufacture of sodium nitrate from Chilean Caliche. 515

HEALEY, Walter.—See Edith Mary LANGMAN.

KAPPANNA, A. N.—The kinetics of intramolecular transformation of ammonium thiocyanate to thiourea and thiourea to ammonium thiocyanate. 217

KRISHNA, Sri and Bhagwan DAS.—Gas volumetric estimation of SOOH in organic sulphinic acids. ... 367

KRISHNA, Sri and Sajjan SINGH.—The action of carbon tetrachloride on certain mercaptans 291

KRISHNAMURTHI, Panchapakesa.—See Biman Bihari DEY.

LAKSHMANAN, M.—See S. K. BASU.

LANGMAN, Edith Mary, Walter HEALEY and Pavitra Kumar DUTT.—The influence of substituents on the stability of Schiff's bases. Part I. Hydrolysis of nitro- and methoxy-benzylidene anilines. 75

LIMAYE, D. B.—Synthesis of coumaryl-4-acetic acid. ... 159

MANJUNATH, Basavalingaiah Lingaiah.—Synthetical experiments in the carbazole series. 271

MEHROTRA, M. R. and K. C. SEN.—Peptisation of metallic hydroxides in presence of sugars. 117

MENON, Kottiazath Narayan.—Note on some derivatives of diphenylmethane. 437

MITTER, Bhupendra Nath.—See Jnanendra Chandra GHOSH.

MITTER, Prafulla Chandra and Ashutosh BHATTACHARYA. —*Bz*-tetrahydroquinazolines. 149

MITTER, Prafulla Chandra, Monmohan SEN and Prafulla Kumar PAUL.—Rubiadin. Part I. Synthesis of 1-methyl-2 : 4-dioxyanthraquinone. 535

PAGE

MUKHERJEE, Asoke.—See Jnanendra Nath MUKHERJEE.
MUKHERJEE, Jadulal.—See Jnanendra Chandra GHOSH.
MUKHERJEE, Jnanendra Nath, Jyoti Kanta BASU and Asoke MUKHERJEE.—Adsorption by polar precipitates. Part IV. Further experiments with silver salts. ... 459
MUKHERJEE, Jnanendra Nath, Subodh Gobinda CHAUDHURY and Satya Prasad RAI-CHAUDHURY.—Variation of the charge of colloidal particles. Part II. Effect of dilution and of non-electrolytes on the charge and its variation with concentration of electrolytes. 493

NAIK, Kuverji Gosai and Yeshwant Narayan BHAT.—Interaction of sulphur monochloride with organic compounds containing the reactive methylene groups. Formation and properties of dithioketones ($R_2C : S : S$) and dithioethers ($R_2S : S$). Part IV. 525
—Condensation of cyanacetic ester with some aryl and alkylamines. Preparation of some alkyl and aryl substituted cyanacetamides. 547
NAIK, Kuverji Gosai and Mohonlal Laxmidas SHAH.—Interaction of sulphuryl chloride with substances containing the reactive methylene group. 11
NAMASIVAYAM, D.—Adsorption of acids by cocoanut charcoal and acetylene carbon. 449
NARAYAN, Badri.—See Phuldeo Sahay VARMA. ...
NIYOGY, Sudhir Chandra.—A new method for the preparation of 4-acetylamino-3-chloro-aniline ... 80
—Preparation of 4-acetylamino-3-chlorophenyl stibinate of sodium. 96
—Organo-antimony compounds. Part I. ... 397

PAUL, Prafulla Kumar.—See Prafulla Chandra MITTER.
PURAKAYASTHA, Rukmini Mohan and Jnanendra Chandra GHOSH.—Photo-chemical reaction between bromine and (1) cinnamic acid, (2) stilbene. Part IV. ... 409
—Photobromination of cinnamic acid and stilbene. Part III. 553

RAI-CHAUDHURY, Satya Prasad.—See Jnanendra Nath MUKHERJEE.

PAGE

RANE, M. B.—The effect of the adition of some alkaloids on the rate of solution of iron in dilute hydrochloric acid. Part II. The effect of nicotine, narcotine and gelatine and the fall in E.M.F. produced in the iron in presence of brucine. 387

RAY, Jnanendra Nath.—A synthesis of oxy-palmatine: Dehydro-*nor*-oxy-Ψ-coralydin. 403

—See also Ananta Kumar DE, and Ramani Mohan ROY.

RAY, Nirmalendu Nath.—See (Sir) Prafulla Chandra RAY.

RAY, (Sir) Prafulla Chandra.—On the variability of valency. 89

RAY, (Sir) Prafulla Chandra, Kshitish Chandra BOSE-RAY, and Nadia Bihari ADHIKARI.—Varying valency of platinum with respect to mercaptanic radicles. Part VI. 467

RAY, (Sir) Prafulla Chandra and Nirmalendu Nath RAY.—On a new series of double sulphates of the copper-magnesium group and the sulphonium bases. Part I. 37

RAY, Priyada Ranjan.—Thiosulphato-cobalt complexes and complex cobalt thiosulphates. Part I. ... 64

—Part II. Thiosulphato-pentacyano-potassium cobaltiate. 325

RAY-CHAUDHURY, Dhirendra Chandra.—See Prafulla Kumar BOSE.

ROY, Hira Lal.—An experimental contribution to the theory of equation of state for adsorbed substances. ... 307

ROY, Ramani Mohan and Jnanendra Nath RAY.—Synthesis of substituted ureas and thio-ureas. 339

SAHA, Jogendra Mohan.—See Gopal Chandra CHAKRAVARTI.

SEN, Hemendra Kumar and Chittaranjan BARAT.—Preliminary note on the action of *cyclo*-hexene oxide on alkali and ammonium halides. 22

SEN, Hemendra Kumar and Umaprasanna BOSE.—Formation of heterocyclic compounds. Part II. ... 51

SEN, Hemendra Kumar and Sisir Kumar GHOSH.—Reaction of diazonium salts with hydroxymethylene *cyclo*-hexanones and cyclic β-diketones. ... 447

SEN, Kshitish Chandra.—Peptisation of iron and chromium hydroxides in presence of non-electrolytes and the influence of acid and alkali on the peptisation. ... 131

PAGE

See also M. R. MEHROTRA.
SEN, Nirmal Kumar.—Jute seeds—*Corchorus capsularis*. Part I. 205
SEN, Monmohan.—See Prafulla Chandra MITTER.
SEN, Pratul Chandra.—See Prafulla Chandra GUHA.
SESHADRI, Tiruvenkata Rajendra.—See Biman Bihari DEY.
SHAH, Mohonlal Laxmidas.—See Kuverji Gosai NAIK.
SINGH, Bawa Kartar.—Edwin Roy Watson. 111
SINGH, Sajjan.—See Sri KRISHNA.
SIRCAR, Anukul Chandra.—See Pran Kumar DE.

TEWARI, Jamuna Dutt and Sikhibhusan DUTT.—Dyes derived from imidazole dicarboxylic acid. 201

VARMA, Phuldeo Sahay and Jyotsnalal DAS-GUPTA.—A note on a comparative study of the preparation of anthraquinone. 297
VARMA, Phuldeo Sahay and Badri NARAYAN.—Halogenation. Part III. Bromination. 283
See also Rasik Lal DATTA.
YAJNIK, N. A.—See S. S. BHATNAGAR.
ZADOO, Vasu Dev.—See S. S. BHATNAGAR.

Journal of the Indian Chemical Society
Vol. IV. 1927

INDEX OF SUBJECTS

A

PAGE

Absorption maxima of citraconeins and itaconeins (DHAR and DUTT) 256
Acceptor molecules, the concentration of, and velocity of photobromination (PURAKAYASTHA and GHOSH) 411
5:6-Acenaphtho-3-aminotriazine (DE) 185
Acetylallylimino-*C*-methylthiobiazole (DE) 9
p-Acetylaminobenzoic acid (BOSE) 338
4-Acetylamino-3-bromoaniline (NIYOGY) 400
4-Acetylamino-3-chloroaniline (NIYOGY) 80
4-Acetylamino-chlorophenyl stibinate of sodium (NIYOGY) 96
4-Acetylamino-3:5-dibromoaniline (NIYOGY) 400
4-Acetylamino-3:5-dibromophenyl stibinate of sodium (NIYOGY) 402
4-Acetylamino-3:5-dichloroaniline (NIYOGY) 399
4-Acetylamino-3:5-dichlorophenyl stibinate of sodium (NIYOGY) 401
4-Acetylamino-3:5-diiodoaniline (NIYOGY) 401
4-Acetylamino-3:5-diiodo-1-nitrobenzene (NIYOGY) 399
4-Acetylamino-3:5-diiodophenyl stibinate of sodium (NIYOGY) 402
4-Acetylamino-3-iodo-aniline (NIYOGY) 401
4-Acetylamino-3-iodo-1-nitrobenzene (NIYOGY) 399
4-Acetylamino-3-iodophenyl stibinate of sodium (NIYOGY) 402
4-Acetylamino-2-phenyl stibinate of sodium (NIYOGY) 402
2-Acetyl*cyclo*hexanone, action of cyanacetamide upon (SEN and BASU) 57
2-Acetyl*cyclo*hexanone, action of methylcyanacetamide upon (SEN and BASU) 61
Acetylene carbon, adsorption of acids by (NAMASIVAYAM) 449

PAGE

Acid and alkali upon peptisation, influence of (SEN) ... 131
Acids, adsorption by cocoanut charcoal and acetylene carbon (NAMASIVAYAM) 449
Action of light on ammonium thiocyanate (BHATNAGAR, DUNNICLIFF and ALI) 229
Adhatoda vasica, alkaloid present in (GHOSE) ... 1
Adsorbed substances, and theory of equation of state (ROY) 307
Adsorption of acids by charcoal and carbon (NAMSIVAYAM) 449
Adsorption of ions and of sols at interfaces (DHAR) ... 173
—K and Cl ions (DHAR) 176
—of sols by their own precipitate (DHAR) ... 178
Adsorption by polar precipitates (MUKHERJEE, BASU and MUKHERJEE) 409
After-effect in photobromination (PURAKAYASTHA and GHOSH) 557
Alkali, upon peptisation, effect of (SEN and MEHROTRA) ... 125
—on peptisation, influence of (SEN) 131
Alkali halides, action upon *cyclo*hexene oxide (SEN and BARAT) 22
Alkaloids, effect of, on the sate of solution of iron in hydrochloric acid (RANE) 387
1-Allyl-3:4-benzo-7-thiol-1:2:5:6-heptatetrazine (GUHA and GHOSH) 571
2-Allylimino-5-methylthiol-2:3-dihydro-1:3:4-thiodiazole and acetyl derivative (GUHA and GUHA) 169—70
Allylimino-*C*-phenylthiobiazole (DE) 10
Allylimino-thiobiazolethiol (DE) ... 10
1-Allylthiocarbamido-2-phenylthiosemicarbazido-benzene (GUHA and GUHA) 569
Allylthiosemicarbazide, action of hydrochloric acid upon (DE) 6
4-Allylthiosemicarbazide-1-methyl-dithiocarboxylate (GUHA and GUHA) ... 169
1-Amino-4-acetylamino-3-chlorobenzene (NIYOGY) ... 82
Amino compounds, replacement of sulphonic by nitro groups in (DATTA and VARMA) 321
3-Aminocarbazole, preparation of (MANJUNATH) ... 274
9-Amino-carbazole (MANJUNATH) 279
3-(2′-Amino-4′-nitranilino-) carbazole (MANJUNATH) ... 275

PAGE

2-Amino-4:8-dimethyl-*bz*-tetrahydro-quinazoline (MITTER and BHATTACHARYA) 153
2-Amino-4-hydroxy-*bz*-tetrahydro-quinazoline (MITTER and BHATTACHARYA) 155
—7-methylderivative (MITTER and BHATTACHARYA) ... 156
—8-methyl „ (MITTER and BHATTACHARYA) ... 155
Aminoketothiodiazoles, formation of (GUHA and GUHA) ... 43
2-Amino-4-methyl-5-*p*-aminophenyl-thiazole, and its hydrochloride, picrate, chloroplatinate, acetyl and benzylidene derivatives (BOSE) 337
2-Amino-4-methylbenzo-tetrahydro-quinazoline (MITTER and BHATTACHARYA) 152
2-Amino-4-phenyl-5-*p*-aminophenyl-1 : 3-thiazole and its hydrochloride, picrate, chloroplatinate and acetyl derivatives (BOSE) 334
o-Aminophenyl hydrazine derivatives (GUHA and GHOSH) 561
1-*o*-Aminophenyl-4-allyl thiosemicarbazide (GUHA and GHOSH) 568
1-*o*-Aminophenyl-4-phenyl thiosemicarbazide (GUHA and GHOSH) 566
1-*o*-Aminophenyl-4-*p*-tolyl thiosemicarbazide (GUHA and GHOSH) 567
1-*o*-Aminophenyl-4-xylyl-thiosemicarbazide (GUHA and GHOSH) 568
Aminothiol triazoles, formation of (GUHA and SEN) ... 43
2-Amino-4-*p*-tolyl-5-*p*-aminophenyl 1 : 3-thiazole, and its hydrochloride, picrate, chloroplatinate, and acetyl derivatives (BOSE) 336
Ammonium halides, action upon of *cyclo*hexene oxide (SEN and BARAT) 22
Ammonium thiocyanate, action of light upon (BHATNAGAR, DUNNICLIFF and MD. ALI) 229
Ammonium thiocyanate, intramolecular transformation of (KAPPANNA) 217
2-Anilino-5 : 6-benzo-8-nitrophenyl-1 : 3 : 4 : 7-thio octatriazine (GUHA and GHOSH) 572
Anils, hydrolysis of (LONGMAN, HEALEY and DUTT) ... 77
2-*o*-Anisylamino-2 : 3-dihydro-3-*p*-tolyl-1 : 3 : 4-thiodiazine (BOSE and RAY CHAUDHURY) 262

PAGE

Anthraquinone, preparation of (VARMA and DAS GUPTA) 297
Antimony Compounds, organo (NIYOGY) ... 397
Antimony trisulphide sol and silver sol, interaction of (BHATNAGAR, YAJNIK and ZADOO) ... 212
Antimony trisulphide sol and gold sol, interaction of (BHATNAGAR, YAJNIK and ZADOO) ... 214
Arsenic sulphide sol, effect of non-electrolytes on the charge of (MUKHERJEE, CHAUDHURY and RAI-CHAUDHURY) 502
Arsenic trisulphide sol and Gold and Silver sols, interaction of (BHATNAGAR, YAJNIK and ZADOO) 211, 213

B

Benzalacetone thiosemicarbazone and its 4-methyl, 4-α-naphthyl, 4-phenyl, and 4-*p*-tolyl derivatives (BOSE and RAY-CHAUDHURY) 87
1-Benzalanilino-4-phenylthiosemicarbazide (GUHA and GHOSH) 572
Benzidine rearrangement in the heterocyclic series (BOSE) 331
Benzil, action on methyldithiocarbazinate (GUHA and GUHA) 243
2 : 3-Benzo-6-phenylamino-8-keto-1 : 4 : 5 : 7-octatetrazine (GUHA and GHSH) 570
3 : 4-Benzo-7-phenylamino (-*p*-tolylamino) 1 : 2 : 5 : 6-thio-heptatriazine (GUHA and GHOSH) 571
Benzotetrahydroquinazolines (MITTER and BHATTA-CHARYA) 149
3-Benzyl-2 (-*o*-hydroxystyryl)-benzopyrylium chloride, ferric chloride and perchlorate (DE) ... 26
3-Benzyl-2 (*o*-hydroxy-α-benzostyryl) β-naphthopyrylium ferric chloride, perchlorate (DE) 27
3-Benzyl *spiro* dibenzopyran (DE) 26
3-Benzyl *spiro*-2 : 2′-di (β-naphtho-5 : 6-pyran-1 : 2) (DE) ... 28
Benzylidene allyl thiosemicarbazide (DE) ... 9
—Hydrazidomethylthiazole and its acetyl, benzoyl and nitroso derivatives (DE) ... 9
Bromination (VARMA and NARAYAN) ... 283

PAGE

Bromobenzene (VARMA and NARAYAN) 286, 288-89
Bromochlorobenzene (VARMA and NARAYAN) ... 286
p-Bromo-iodobenzene (VARMA and NARAYAN) ... 286
2-Bromo-4-nitraniline (NIYOGY) 398
5 : 6-Bromophenanthro-3- aminotriazine (DE) ... 186
Bromotoluene (VARMA and NARAYAN) ... 286
5-Bromoxylene (VARMA and NARAYAN) ... 286
Brucine, fall in E. M. F. in iron in presence of (RANE) ... 387
Butyranilide and isobutyranilide, condensation with urethane (DE and RAY) 543

C

Cadmium triethyl sulphonium sulphate (RAY and RAY) ... 41
Caliche, manufacture of sodium nitrate from (HAMID) ... 515
1-Carbamido-2-phenylthiosemicarbazidobenzene (GUHA and GHOSH) 570
Carbazole series, synthetical experiments in (MANJUNATH) 271
1 : 3-Carbazyl-5-aminobenzo-, 1 : 3-carbazyl-5-nitrobenzo-triazole (MANJUNATH) 275
Carbon monoxide, methane from hydrogen and (CHAKRAVARTY and GHOSH) 431
Carbon tetrachloride, action on mercaptans (KRISHNA and SINGH) 291
Catechol citraconein (DHAR and DUTT) ... 255
—imidazomalein (TEWARI and DUTT) ... 203
—itaconein hydrochloride (DHAR and DUTT) ... 249
Cerium hydroxide, peptisation of (MEHROTRA and SEN) ... 120
Charge and coagulating concentration, relation between (MUKHERJEE, CHAUDHURY and RAI-CHAUDHURY) ... 513
Chilean caliche, manufacture of sodium nitrate from (HAMID) 515
Chloromalon-dimethylphenylamide (NAIK and SHAH) ... 20
—di-α-naphlteylamide dichloride (NAIK and SHAH) ... 20
Chloromethyl chloromalon-diphenylamide-, di-tolylamides (NAIK and SHAH) 20
2-Chloro-4-nitraniline (NIYOGY) 82
Chlorovasicine (GHOSE) 2

PAGE

Chromium hydroxide, peptisation of (SEN) ... 133
Cinnamic acid, photobromination of (PURAKAYASTHA and GHOSH) ... 409, 553
Cinnamylidene-4-ethyl-, -4-methyl-, -4-phenyl-, 4-*o*-tolyl-, -4-*m*-tolyl-, -4-*p*-tolyl-, -4-β-naphthylthiosemicarbazides (BOSE and RAY-CHAUDHURY) ... 86-87
Coagulating concentration and charge, relation between (MUKHERJEE, CHAUDHURY and RAY-CHAUDHURY) ... 513
Cobalt thiosulphates, complex (RAY) ... 64
Cobalt triethylsulphonium sulphate (RAY and RAY) ... 41
Cocoanut charcoal, adsorption of acids by (NAMSIVAYAM) 449
Colloidal particles, effect of dilution on the charge of (MUKHERJEE, CHAUDHURY and RAI-CHAUDHURY) ... 499
—Variation of the charge of (MUKHERJEE, CHAUDHURY and RAY-CHAUDHURY) 493
Compounds :
$C_{11}H_{12}N$ (GHOSH) 3
$PtCl_2 . 4\ NH_3$, $PtCl_2 . 4\ C_7H_7 \cdot NH_2$,
$Pt_2Cl_6 . 3\ C_2H_4\ (NH_2)_2 . (C_2H_4S)_3$,
$PtCl_2 . (C_2H_4S)_2$, $PtCl_2, 2\ C_2H_4\ (NH_2)_2$,
$PtCl_3 . (C_2H_4)_3S_2$, $PtCl_2 . 2\ C_5H_5N$,
$Pt_2Cl_7, 4\ C_5H_5N$, $PtCl_2 . C_6H_5NMe_2$,
$PtCl_2 . 3\ C_5H_{11}N$, $PtCl_2 . (C_2H_4S)_2$,
$PtCl_3 . 2\ Et_2NH$, $PtCl_2 . Et\ NH . Me_2CO$,
$PtCl_3 . 4\ C_6H_4\ (NH_2)_2$ (RAY, BOSE-RAY and ADHIKARI) ... 474-475
Condensation of cinnamic aldehyde, and of benzalacetone with benzyldithiocarbazinate (BOSE and RAY-CHAUDHURY) 88
—Methyl ethyl ketone with *o*-hydroxy aldehydes (DE) ... 137
Copper hydroxide, peptisation of (MEHROTRA and SEN) ... 119
Copper-Magnesium group, double sulphates of the (RAY and RAY) 37
Coumaryl-4-acetic acid (LIMAYE) ... 159
Cupric oxide sol, preparation of (BASU and LAKHSMANAN) 29
—Protective action of Rochelle salt upon (BASU and LAKSHMANAN) 29
Cyanacetamides, aryl and alkyl substituted (NAIK and BHAT) 547

PAGE

Cyanacetamide, condensation with acetyl*cyclo*hexanones (SEN and BOSE) ... 57-63
Cyanacet-anilide, -*o*-toluidide, -*m*-toluidide, -*p*-toluidide α naphthyl amide, -β-naphthylamide, adj-*m*-xylidide, methyl amide, -ethylamide (NAIK and BHAT) 549-51
Cyanacetic ester, condensation with amines (NAIK and BHAT) 547

D

Dehydro-*nor*-oxy-Ψ coralydin (RAY) ... 403
p-Di-(*o*-aminoanilino) benzene (MANJUNATH) ... 277
3 (2′:4′-Diaminoanilino)-carbazole (MANJUNATH) ... 277
1-*p*-2′:4′-Diaminoanilinophenyl benzotrizole (MANJUNATH) 278
2:7-Diaminocarbazole and its diacetyl, and dibenzylidene derivatives (MANJUNATH) 278
4:4′-Diamino-3′-(?)-carboxyl diphenyl disulphide (KRISHNA and SINGH) 296
Dibenzyldithiophthalate (CHAKRAVARTI and SHAHA) ... 146
4:7-Diamino-1:3-dianilino benzane, action of nitrous acid upon (MANJUNATH) 276
Diazonium salts, action upon hydroxy methylene ketones (SEN and GHOSH) 477
Dibromobenzene (VARMA and NARAYAN) ... 286
4:4-Dibromo-6′-(?) carboxyl diphenyl disulphide (KRISHNA anb SINGH) 296
2:6-Dibromo-4-nitraniline (NIYOGY) ... 399
4:4′-Dibromo-3:3′-Dinitrobenzophenone (MENON) ... 439
4:4′-Dibromo-3:3′-dinitrodiphenyl methane (MENON) ... 438
Dibromo diphenyl dithiophthalate (CHAKRAVARTI and SAHA) 144
5 : 6-Dibromophenanthro-3-aminotriazine (DE) ... 187
Dibutyldithiophthalate (CHAKRAVARTI and SAHA) ... 147
4 : 4′-Dichloro-6′ (?)-carboxyl diphenyl disulphide (KRISHNA and SINGH) 295
2 : 6-Dichloro-4-nitraniline (NIYOGY) ... 399
Dichloromalon-dibenzylamide, -chloro-phenylamide,- di-β-naphthylamide, dichloride, -diphenylamide, dipropyl-

PAGE

amide, -di-*o*-tolyl amide, -di-*p*-tolylamide, -di-*m*-tolyl-amide (and its dichloride) (NAIK and SAHA) ... 17-20
o-Diderivatives of benzene (GUHA and GHOSH) ... 561
Dielectric constant and molecular volume of gases (BISWAS) 442
m-Diethylamidophenol citraconein (DHAR and DUTT) ... 255
m-Diethylamidophenol itaconein (DHAR and DUTT) ... 251
Diethyl dithiophthalate (CHAKRAVARTI and SHAH) ... 146
Diethylene sulphide dithiophthalate (CHAKRAVARTI and SHAH) 147
4 : 4′-Diiodo diphenyl methane (MENON) ... 438
Diiodo diphenylphthalate (CHAKRAVARTI and SHAH) ... 143
o-Diketonic group, reactivity of (DE and SIRCAR) ... 531
3 : 4-Dimethoxyphenylethylamine (RAY) ... 406
4 : 4′-Dimethyl-3-carboxy-diphenyl sulphide (KRISHNA and SINGH) 295
2 : 5-Dimethylthiol-1 : 3 : 4-thiobiazole (GUHA and GUHA) 165
Di-β-naphthyl dithiophthalate (CHAKRAVARTI and SAHA)... 145
p-Di (nitranilino)-benzene (MANJUNATH) ... 277
3-(2′ : 4′-Dinitranilino)-carbazole (MANJUNATH) ... 275
1-*p*-2′ : 4′-Dinitranilophenylbenzo triazine (MANJUNATH) ... 278
2 : 5-Dinitrophenol (DATTA and VARMA) ... 322
2 : 4-Dinitrophenol (DATTA and VARMA) ... 325
3 : 5-Dinitro-*o*-cresol (DATTA and VARMA) ... 323
3 : 5-Dinitro-*p*-cresol (DATTA and VARMA) ... 323
Diphenyl dithiophthalate (CHAKRAVARTI and SAHA) ... 143
Diphenylmethane, derivatives of (MENON) ... 437
Diphenyl parabanic acid (DE and SIRCAR) ... 534
Diphenyl thioparabanic acid,condensation with *o*-phenylene diamine (DE and SIRCAR) 533
Diphenyl thiourea (ROY and RAY) 342
Diphenyl urea (ROY and RAY) 342
Dithioethers, properties of (NAIK and BHAT) ... 525
Dithioketone, properties of (NAIK and BHAT) ... 525
Ditolyldithiophthalate (CHAKRAVARTI and SAHA) ... 145
Dulcin (ROY and RAY) 341
Dyes from citraconic acid (DHAR and DUTT) ...
—imidazole dicarboxylic acid (TEWARI and DUTT) ... 201

PAGE

—Itaconic acid (DHAR and DUTT) 247
Dyes, decomposition of, by solar radiation (BARAT and DUTT) 265

E

Einstein's Law of photochemical equivalence (GHOSH and MUKHERJEE) 350
—(GHOSH and BASU) 382
Electrolysis of ammonium thiocyanate solution (BHATNAGAR, DUNNICLIFF and MD. ALI) ... 234
Electronic structure, dependence of the Ionisation potential of elements on (GHOSH) 423
2 : 5-Endoxy-1 : 3 : 4-triazole (GUHA and SEN) 47-49
Equation of state for adsorbed substances (ROY) ... 307
Equilibrium between thiourea and ammonium thiocyanate (KAPPANNA) 220
Ethyl*cyclo*hexane carboxylate, action of cyanacetamide upon (SEN and BOSE) 63
Ethyl *trans*-6-hydroxy quinolyl-5-β-acrylate (DEY and SESHADRI) 194
Ethyl trans-2-methyl-6-hydroxy quinolyl-β-acrylate (DEY and SESHADRI) 195
Extinction cœfficients of mixtures of uranyl nitrate and organic acids (GHOSH and MITTER) ... 353

F

Ferric hydroxide, peptisation of (MEHROTRA and SEN) ... 119
— (SEN) 132
Ferrous triethyl sulphonium sulphate (RAY and RAY) ... 41

G

Gas volumetric estimation of SOOH (KRISHNA and DAS)... 367
Gelatine, effect of, and the fall in E. M. F. in iron (RANE) 387

PAGE

H

Halogenation (VARMA and NARAYAN) ... 283
Heterocyclic compounds, formation of (SEN and BOSE) ... 51
— (GUHA and GUHA) 239
Hexamine cobaltic chlorothiosulphate (RAY) ... 70
*cyclo*Hexane-1 : 2-dione-diphenylhydrazone (SEN and GHOSH) 484
*cyclo*Hexane-1 : 2-dione-1-*p*-nitrophenylhydrazone (SEN and GHOSH) 485
—1 : 2-dione-1-*p*-nitrophenyl hydrazone-2-phenylhydrazone (SEN and GHOSH) 486
—1 : 2-dione-monoacetyl phenylhydrazone (SEN and GHOSH) 489
—1 : 2-dione-monoacetyl tolylhydrazone (SEN and GHOSH) 490
—1 . 2-dione-monocarbethoxy phenylhydrazone (SEN and GHOSH) 491
—1 : 2-dione-*p*-tolylhydrazone (SEN and GHOSH) ... 484
—1 : 2-dione-1-phenylhydrazone-2-*p*-tolylhydrazone (SEN and GHOSH) 485
—1 : 2-dione phenylhydrazone (SEN and GHOSH) ... 483
*cyclo*Hexene oxide, action of alkali and ammonium halides upon (SEN and BARAT) 22
8 : 9-(1 : 2-*cyclo* Hexyl) tetrahydrocarbazole (MANJUNATH) 280
8 : 9-(1 : 2'-*cyclo* Hexyl) tetrahydrocarbazole (MANJUNATH) 281
Hydrogen, formation of methane from carbon monoxide and (CHAKRAVARTY and GHOSH) 431
Hydrolysis of anils (LONGMAN, HEALEY and DUTT) ... 76
o-Hydroxyaldehydes, condensation with α-alkylated-β-ketonic esters (DE) 23
—Condensation with methylethyl ketone (DE) ... 137
2-Hydroxy-5-methylthiol-1 : 3 : 4-thiodiazine (GUHA and GUHA) 245
Hydroxymethylene ketones, reaction of diazonium salts with (SEN and GHOSH) 477
Hydroxyquinol-imidazomalein (TEWARI and DUTT) ... 203
6-Hydroxyquinolyl-5-β-acrylic acids and their derivatives (DEY and SESHADRI) 189
cis-6-Hydroxyquinolyl-5-β-acrylic acid, preparation of (DEY and SESHADRI) 191

PAGE

trans-6-Hydroxyquinolyl-5-α-acrylic acid and its salts (DEY and SESHADRI) 193
6-Hydroxyquinolyl-5-β-ethylene (DEY and SESHADRI) ... 194
Hydroxy tetrammine cobalt sulphide (RAY) ... 69

I

Induction period in photobromination (PURAKAYASTHA and GHOSH) 557
Intramolecular transformation of ammonium thiocyanate to thiourea, kinetics of (KAPPANNA) ... 217
Ionisation potential of elements and their electronic structure (GHOSH) 423
Ions, at interfaces adsorption of (DHAR) ... 173
Iron, rate of solution of, in dilute hydrochloric acid (RANE) 387
Iron hydroxide, peptisation of (SEN) ... 131
Isatin monoxime, action upon methyldithiocarbazinate (GUHA and GUHA) 244
5 : 6-Isato-3-aminotriazine (DE) 186
Ionising potential of elements and molecular volumes (BISWAS) 441

J

Jute seeds (SEN) 205

K

β-Ketonic esters, condensation with *o*-hydroxy aldehydes (DE) 23
2-Keto-5-phenylamino-2 : 3-dihydro-1 : 3 : 4-thiodiazole (GUHA and SEN) 47
1-Keto-tetrahydrocarbazole (SEN and GHOSH) ... 484
—3-methyl and 3-nitro derivative (SEN and GHOSH) ... 485
1-Keto-2-methyl tatrahydrocarbazole (SEN and GHOSH) ... 487

PAGE

1-Keto-2-methyl-tetrahydro-3-methylcarbazole (SEN and GHOSH) 488
1-Keto-2-methyl-tetrahydro-naphthocarbazole (SEN and GHOSH) ... 489
2-Keto-5-tolylamino-2 : 3-dihydro-1 : 3 : 4-thiodiazole (GUHA and SEN) 49
2-Keto-5-xylylamino-2 : 3-dihydro-1 : 3 : 4-thiodiazole (GUHA and SEN) 49

L

Leucomalachite green, photo-oxidation of (GHOSH and MUKHERJEE) 343
Light, action of,upon ammonium thiocyanate (BHATNAGAR DUNNICLIFF and MD. ALI) 229

M

Magnesium triethyl sulphonium sulphate (RAY and RAY) 41
Malon-di-*iso*butylamide, -di-*n*-heptyl amide, - dimethyl-amide, di-*n*-propylamide, -di-*m*-toluidide and their condensation with sulphur monochloride (NAIK and BHAT) 526-28
Manganese triethylsulphonium sulphate (RAY and RAY) ... 41
Mechanism of photochemical reaction (GHOSH and BASU) 382
Mercaptans, interaction with phthalic anhydride and phthalic chloride (CHAKRAVARTY and SAHA) ... 141
Mercaptans, action of carbon tetrachloride upon (KRISHNA and SINGH) 291
Mercaptanic radicles and varying valency of platinum (RAY, BOSE-RAY and ADHIKARI) 467
Mercuric oxide, peptisation of (MEHROTRA and SEN) ... 120
Metallic hydroxides, peptisation of (MEHROTRA and SEN) 117
Methane, formation of, from carbon monoxide and hydrogen (CHAKRAVARTY and GHOSH) 431
Methoxy benzylidene aniline, hydrolysis of (LONGMAN, HEALEY and DUTT) 75

PAGE

2-, 4-, 5-, and 6-methylacetyl *cyclo*hexanone, action of cyanacetamide upon (SEN and BOSE) 60-62
3-Methylamino carbazole (MANJUNATH) ... 279
Methylethylketone condensation with *o*-hydroxyaldehydes (DE) 137
1-Methyl-2 : 4-dioxyanthraquinone and its diacetyl derivative (MITTER, SEN and PAUL) ... 539
2-Methyl-3 : 5-dimethoxybenzoic acid and its methyl ester (MITTER, SEN and PAUL) 537
6-Methyl-3 : 5-dimethoxyphthalide (MITTER, SEN and PAUL) 538
6-Methyl-3 : 5-dimethoxyphthalide carboxylic acid (MITTER, SEN and PAUL) 538
2-Methyl-3 : 5-dioxybenzoic acid (MITTER, SEN and PAUL) 536
6-Methyl-3 : 5-dimethoxy-2-trichloro-methylphthalide (MITTER, SEN and PAUL) 537
Methyl-dithiocarbazinate, action upon *o*-diketones, their monoximes, chlorides and esters of dibasic acids (GUHA and GUHA) 239
Methyl dithiocarbazinate sulphite (GUHA and GUHA) ... 244
6-Methylhexahydro carbazole and its nitroso derivative (MANJUNATH) 282
3-Methyl *cyclo*hexane-1 : 2-dione naphthylhydrazone (SEN and GHOSH) 486
3-Methyl *cyclo*hexane-1 : 2-dione-phenylhydrazone, -osazone-*p*-tolylhydrazone (SEN and GHOSH) 486-87
3-Methyl *cyclo*hexane-1 : 2-dione-1-tolyl-2-phenylhydrazone (SEN and GHOSH) 488
3-Methyl *cyclo*hexane-1 : 2-dione-monoacetyl tolyl-hydrazone and monoacetyltolylhydrazone (SEN and GHOSH) ... 490-91
6-Methyl-8 : 9 (1′ : 2′-*cyclo*hexyl) tetrahydro carbazole, picrate of (MANJUNATH) ... 282
3-Methyl-2 (-*o*-hydroxy-α-benzo-)-β-naphtho-pyrylium ferric chloride and perchlorate (DE) ... 27
7-Methyl-2-(-*o*-hydroxy-α-benzostyryl)-β-naphtho-pyrylium chloride (DE) ... 140
3-Methyl-2-hydroxy-2 (2′ : 4′-dihydroxy-styryl benzopyrylium chloride (DE) 139

PAGE

3-Methyl-7 : 7′-dihydroxy *spiro*dibenzopyran (DE) ... 139
3-Methyl-2-(*o*-hydroxy styryl) benzo-pyrylium chloride, ferric chloride, perchlorate (DE) ... 25, 138
cis-2-Methyl (8-methyl)-2-hydroxy quinolyl-5 ℓ-acrylic acid (DEY and SESHADRI) 192
trans-2-Methyl-6-hydroxy quinolyl-5-ℓ-acrylic acid and its hydrochloride, silver salt and ethyl ester (DEY and SESHADRI) 195
trans-8-Methyl-6-hydroxy quinolyl-5-ℓ-acrylic acid and its ethyl ester and sodium salt (DEY and SESHADRI) ... 196
Methyl *trans*-6-Hydroxy quinolyl-5-ℓ-acrylate (DEY and SESHADRI) 194
2-Methyl-6-hydroxy quinolyl-5-ℓ-ethylene (DEY and SESHADRI) 195
8-Methyl-6-hydroxy quinolyl-5-ℓ-ethylene (DEY and SESHADRI) 196
Methylmalon-dibenzylamide, -di-*m*-toluidide (NAIK and BHAT) 529
3-Methyl-4-oxy-quinazoline (GHOSE) 4
3-Methyl *spiro*dibenzopyran (DE) ... 25, 138
3-Methyl *spiro*-2 : 2′-di (ℓ-naphthyl-5 : 6-pyran-1 : 2) (DE) ... 27
3-Methyl *spiro*-dinaphthopyran (DE) ... 140
Methyl thiazoles, acetyl, benzoyl, hydroxy and nitroso derivatives (DE) 7-8
2-Methylthiol-5-hydroxy-6 : 7-benzo-8-keto-1 : 3 : 4-octa-thiodiazine (GUHA and GUHA) 244
2-Methylthiol-5-hydroxy-6-keto-1 : 3 : 4-thiodiazine (GUHA and GUHA) 244
2-Methylthiol-5-hydroxy-8-keto-1 : 3 : 4-octathiodiazine (GUHA and GUHA) 245
2-Methylthiol-5-hydroxy-6 : 7-dihydro-8-keto-1 : 3 : 4-octa-thiodiazine (GUHA and GUHA) 245
Methylene group (reactive), action upon sulphur mono-chloride (NAIK and SHAH, NAIK and BHAT) 11, 525
Molecular volumes and minimum ionising potential of elements (BISWAS) 441
—and structure of atoms (BISWAS) 445
Molecular strain and theory of colour (DUTT) ... 99

N

PAGE

5 : 6-Naphtho-3-amino and 5 : 6-naphtho-3-hydroxy triazine (DE) 185
ε-Naphthylamino-3-acetyl-5-methylthiol-2 : 3-dihydro-1 : 3 : 4-oxydiazole (GUHA and GUHA) ... 171
4-Naphthylsemicarbazide (GUHA and GUHA) ... 171
Narcotine and fall in E. M. F. in iron in presence of brucine (RANE) 387
Nickel hydroxide, as catalyst, in the formation of methane (CHAKRABARTY and GHOSH) ... 432
Nickel triethyl sulphonium sulphate (RAY and RAY) ... 41
Nickel trimethyl sulphonium sulphate (RAY and RAY) ... 42
Nicotine, effect of, on rate of solution of iron in hydrochloric acid (RANE) 387
Nitration of coumarin (DEY and KRISHNAMURTHY) ... 197
1-*o*-Nitrobenzanilide-4-phenylthiosemicarbazide (GUHA and GHOSH) 572
m-Nitrobenzylidene malonic ester, photobromination of (GHOSH and BASU) 375
6-Nitro and 8-Nitro-coumarin (DEY and KRISHNAMURTHY) 198
Nitropentammnine thiosulphate (RAY) ... 73
5 : 6-Nitrophenanthro-3-aminotriazine and their acetyl derivatives (DE) ... 187-88
1-*o*-Nitrophenyl-4-allyl thiosemicarbazide (GUHA and GHOSH) 568
—— -4-*p*-tolylthiosemicarbazide (GUHA and GHOSH) ... 566
—— -4-xylylthiosemicarbazide (GUHA and GHOSH) ... 567
5-Nitro-1 : 3 : 4-xylenol (DATTA and VARMA) ... 323
Nitro groups, replacements of sulphonic acid groups by (DATTA and VARMA) 321
9-Nitroso-hexahydrocarbazole (MANJUNATH) ... 280

O

Obituary notice of E. R. Watson (SINGH) ... 111
Organo-antimony compounds (NIYOGY) ... 397
Oxalic acid (DATTA and VARMA) 323

PAGE

Oxalic ester, action of methyldithio-carbazinate (GUHA and GUHA) 245
Oxidation of 2-acetylamino-5-*p*-acetamidophenyl-1 : 3-thiazole (BOSE) 338
Oxidation of nitrocoumarin (DEY and KRISHNAMURTHY)... 198
Oxybiazoles, formation of (GUHA and GUHA) ... 161
Oxypalmatine, synthesis of (RAY) 403

P

Peptisation of metallic hydroxides (MEHROTRA and SEN) 117
3 : 4-Phenanthra-7-thiomethyl-1 : 2 : 5 : 6-heptathiotriazine (GUHA and GUHA) ... 243
Phenol-citraconein (DHAR and DUTT) 255
—imidazomalein (TEWARI and DUTT) 201
—itaconein (DHAR and DUTT) 248
2-Phenylbenzotetrahydroquinazoline (MITTER and BHATTACHARYA) 156
Phenylbenzothiol triazine (GUHA and GUHA) 566
1-Phenyl-3 : 4-benzo-7-thiol-1 : 2 : 5 : 6-heptatriazine (GUHA and GHOSH) 571
1-Phenylcarbamido-2-phenylthiosemi-carbazidobenzene (GUHA and GHOSH) 570
2-Phenyl-4 : 7-dimethyl-*bz*-tetrahydroquinazoline (MITTER and BHATTACHARYA) 153
2-Phenyl-4 : 8-dimethyl-*bz*-tetrahydroquinazoline (MITTER and BHATTACHARYA) 152
2-Phenyl-4-hydroxy-*bz*-tetrahydroquinazoline (MITTER and BHATTACHARYA) 154
2-Phenyl-4-hydroxy-8-methyl-*bz*-tetrahydroquinazoline (MITTER and BHATTACHARYA) ... 155
2-Phenyl-4-hydroxy-7-methyl-*bz* tetrahydroquinazoline (MITTER and BHATTACHARYA) 156
Phenyl hydrazido methyl thiazole and its acetyl and benzoyl derivatives (DE) 8
2-Phenyl hydrazino-4-methyl-1 : 3-thiazole and its acetyl derivative (BOSE) 336
2-Phenyl hydrazino-4-phenyl-1 : 3-thiazole and its acetyl derivative (BOSE) 334

PAGE

2-Phenylhydrazino-4-*p*-tolyl-1 : 3-thiazole and its acetyl derivative (BOSE) 335
2-Phenylimino-3-acetyl-5-methylthiol-2 : 3-dihydro-1 : 3 : 4-oxbiazole (GUHA and GUHA) 171
2-Phenylimino-2 : 3-dihydro-3 : 5-diphenyl-1 : 3 : 4-thiodiazine (BOSE and RAY-CHAUDHURY) ... 259
2-Phenylimino-2 : 3-dihydro-3-phenyl-5-methyl-1 : 3 : 4-thiodiazine (BOSE and RAY-CHAUDHURY) ... 264
2-Phenylimino-2 : 3-dihydro-3-phenyl-5-tolyl-1 : 3 : 4-thiodiazine (BOSE and RAY-CHAUDHURY) ... 263
2-Phenylimino-2 : 3-dihydro-3-*p*-tolyl-5-phenyl-1 : 3 : 4-thiodiazine (BOSE and RAY-CHAUDHURY) ... 261
2-Phenylimino-2 : 3-dihydro-3-*m*-tolyl-5-phenyl-1 : 3 : 4-thiodiazine (BOSE and RAY-CHAUDHURY) ... 263
2-Phenylimino-2 : 3-dihydro-3-*m*-tolyl-5-*p*-tolyl-1 : 3 : 4-thiodiazine (BOSE and RAY-CHAUDHURY) ... 264
2-Phenylimino-5-methylthiol-2 : 3-dihydro-1 : 3 : 4-thiodiazole and its acetyl derivative (GUHA and GUHA) ... 164
2-Phenylimino-5-thiol-2 : 3-dihydro-1 : 3 : 4-thiodiazole and its methyl and benzyl derivatives (GUHA and GUHA) ... 166
1-Phenyl-2-keto-5-thiol-2 : 3-dihydro-1 : 3 : 4-triazole and its disulphide and dimethyl derivative (GUHA and SEN) 46
2-Phenyl-3-methyl benzopyrylium perchlorate (DE) ... 28
2-Phenyl-4-methyl-*bz*-tetrahydroquinazoline (MITTER and BHATTACHARYA) 151
1-Phenyl-2-phenylamino-5-thiol-1 : 3 : 4-triazole and its methyl and benzyl derivative (GUHA and SEN) ... 47
4-Phenylsemicarbazide-1-methyldithiocarboxylate (GUHA and GUHA) 171
4-Phenylthiosemicarbazide-1-methyl-dithiocarboxylate (GUHA and GUHA) 163
2-Phenyl-4-*m*-tolylthiosemicarbazide (BOSE and RAY-CHAUDHURY) 261
1-Phenylthiocarbamido-2-phenylthiosemicarbazido-benzene (GUHA and GHOSH) 569
Phenylurea (ROY and RAY) 340
o-Phenylenediamine, condensation with diphenylparabanic, thioparabanic acid and thiocarbanilide (DE and SIRCAR) ... 638

PAGE

m-Phenylenediamine-imidazomalein (TEWARI and DUTT) 203
Phloroglucinol-citraconein (DHAR and DUTT) ... 255
Phloroglucinol-imidazomalein (TEWARI and DUTT) ... 202
—itaconein (DHAR and DUTT) 250
Photobromination of *m*-nitrobenzylidene malonic ester (GHOSH and BASU) 375
Photochemical reactions with ZnO (BHATTACHARYA and DHAR) 299
—reaction between bromine and cinnamic acid or stilbene (PURAKAYASTHA and GHOSH) 409
—oxidation of leucomalachite green (GHOSH and MUKHERJEE) 343
"Photo-sols" (BHATNAGAR, YAJNIK and ZADOO) ... 209
Phthalic anhydride and chloride, interaction with mercaptans (CHAKRAVARTI and SAHA) 141
Platinum, varying valency of (RAY, BOSE-RAY and ADHIKARI) 467
Polar precipitate, adsorption by (MUKHERJEE, BASU and MUKHERJEE) 459
Preparation of anthraquinone (VARMA and DAS GUPTA) ... 297
2-Propyl-4-oxyquinazoline (DE and RAY) ... 541
2-*iso*Propyl-4-oxyquinazoline (DE and RAY) ... 544
Pyrogallol-citraconein (DHAR and DUTT) ... 255
—itaconein (DHAR and DUTT) 248
Pyrylium salts (DE) 137

Q

PAGE

R

Reduction of 4-acetylamino-3-bromo-1-nitrobenzene (NIYOGY) 400
Replacement of sulphonic group by nitro group (DATTA and VARMA) 321
Resorcinol—citraconein (DHAR and DUTT) ... 255
„ —imidazomalein (TEWARI and DUTT) ... 202
„ —itaconein (DHAR and DUTT) ... 248
Rochelle salt, protective action of (BASU and LAKSHMANAN) 29
Rubiadin (MITTER, SEN and PAUL) 535

S

Schiff's bases, influence of substituents on the stability of (LONGMAN, HEALEY and DUTT) ... 75
Sodium nitrite, action upon thiosulphatopentammine cobaltic chloride (RAY) 330
Sodium nitrate, manufacture of (HAMID) ... 515
Solar radiation, decomposition of dyes by (BARAT and DUTT) 265
Sols, adsorption of (DHAR) ... 173, 178
spiro-Dypyran (DE) ... 23, 137
Sulphinic acids, estimation of (KRISHNA and DAS) ... 367
Sulphitopentammine thiosulphate (RAY) ... 67
Sulphonium bases, double sulphates of (RAY and RAY) .. 39
Sulphur monochloride, interaction with reactive methylene group (NAIK and BHAT) 525
Sulphuryl chloride, action upon reactive methylene group (NAIK and SHAH) 11
Stilbene, photochemical reaction with bromine (PURAKAYASTHA and GHOSH) ... 409, 553

T

Tetrabromo-resorcinol-citraconein (DHAR and DUTT) ... 255
„ —resorcinol-itaconein (DHAR and DUTT) ... 251

PAGE

2 : 2′ : 5 : 5′—Tetrachloro-6′(?)-carboxy diphenyl disulphide (KRISHNA and SINGH) 295
Thiazole series (DE) 6
Theory of colour (DUTT) ... 99, 264
Theory of equation of state for adsorbed substances (ROY)... 307
Thiobiazoles, formation of (GUHA and GUHA) ... 161
Thiodiazines (BOSE and RAY-CHAUDHURY) ... 257
o-Thiolbenzoic acid, condensation with carbon tetrachloride (KRISHNA and SINGH) 294
Thiol-4-amino-benzoic acid hydrochloride (KRISHNA and SINGH) 296
Thiol-4-bromobenzoic acid (KRISHNA and SINGH) ... 296
Thiol-4-chloro-2-benzoic acid (KRISHNA and SINGH) ... 295
Thiol-dichlorobenzoic acid (KRISHNA and SINGH) ... 295
2-Thiol-5:6-isato-1:3:4-oxdiazine (GUHA and GUHA) ... 242
Thiol-4-methyl-3-benzoic acid (KRISHNA and SINGH) ... 295
2-Thion-5 : 6-acenaphtho-1 : 3 : 4-oxdiazine (GUHA and GUHA) 242
2-Thion-5-methylthiol-2 : 3-dihydro-1 : 3 : 4-thiobiazole (GUHA and GUHA) 165, 167, 169, 170
2-Thion-5 : 6-phenanthro-1 : 3 : 4-oxdiazine (GUHA and GUHA) 242
Thiophenol, condensation with carbon tetrachloride (KRISHNA and SINGH) 294
Thiosemicarbazones, preparation of (BOSE and RAY-CHAUDHURY) 86-87
Thiosulphato-pentacyano-potassium cabaltiate (RAY) ... 325
—— its coagulating power, magnetic moment (RAY) ... 329
Thiosulphato-cobalt complexes (RAY) 64, 325
—— pentammine cobaltic thiosulphate (RAY) ... 66
—— pentammine cobaltic chloride, bromide, iodide, dithionate, chromate, nitrate (RAY) ... 71-73
Thiourea, intramolecular transformation of (KAPPANNA) ... 217
Thioureas, synthesis of substituted (RAY and RAY) ... 339
Time-effect on peptisation (MEHROTRA and SEN) ... 127
2-*p*-Tolyl-4-*o*-anisylthiosemicarbazide (BOSE and RAY-CHAUDHURY) 262
1-Tolyl-2 : 3-benzo-6-thiol-1 : 4 : 5-triazine (GUHA and GHOSH) 567

PAGE

2-*p*-Tolyl-4 : 8-dimethyl (4 : 7-dimethyl) benzo-tetrahydroquinazoline (MITTER and BHATTACHARYA) ... 152
2-*p*-Tolyl-4-hydroxy-*bz*-tetrahydroquinazoline (MITTER and BHATTACHARYA) 154
—— 7-methyl derivative (MITTER and BHATTACHARYA) 155
—— 8-methyl derivative (MITTER and BHATTACHARYA) 156
2-*p*-Tolyl-4-methyl-*bz*-tetrahydroquinazoline (MITTER and BHATTACHARYA) 152
2-*o*-Tolylimino-4 : 5-benzo-8-thio-1 : 3 : 6 : 7-octathiotriazine (GUHA and GHOSH) 569
2-*o*-Tolylimino-3 : 3-dihydro-3 : 5-diphenyl, -3-*p*-tolyl-5-phenyl-1 : 3 : 4-thiodiazine (BOSE and RAY-CHAUDHURY) 260
2-*m*-Tolylimino-2 : 3-dihydro-3 : 5-diphenyl-, -3-*p*-tolyl-5-phenyl-1 : 3 : 4-thiodiazine (BOSE and RAY-CHAUDHURY) ... 261, 263
2-*p*-Tolylimino-2 : 3-dihydro-3 : 5-diphenyl-, -3-*p*-tolyl-5-phenyl-, -3-phenyl-5-*p*-tolyl-1 : 3 : 4-thiodiazine (BOSE and RAY-CHAUDHURY) ... 260, 262, 264
2-*p*-Tolylimino-5-methylthiol-2 : 3-dihydro-1 : 3 : 4-thiodiazole and acetyl derivative (GUHA and GUHA) 166-67
2-*p*-Tolylimino-5-thiol-2 : 3-dihydro-1 : 3 : 4-thiodiazole (GUHA and GUHA) 168
1-*p*-Tolylthiocarbamido-2-phenyl (-*p*-tolyl) thiosemicarbazido-benzene (GUHA and GHOSH) 569
4-*p*-Tolylthiosemicarbazide-1-methyl dithio-carboxylate (GUHA and GUHA) 166
Tolylthiourea (*o*- and *p*-) (ROY and RAY) ... 342
1-Tolyl-2-tolylamino-5-thiol-1 : 3 : 4-triazole and its methyl and benzoyl derivative (GUHA and SEN) ... 48
2-*p*-Tolyl-4-*m*-tolylthiosemicarbazide (BOSE and RAY-CHAUDHURY) 261
Tolylurea (*o*-, *m*- and *p*-) (ROY and RAY) ... 341
Triazines (DE) 183
Triazoles, thiol-keto-, endoxy- and aminothiol- (GUHA and SEN) 43
Triethylene diamine cobaltic thiosulphate (RAY) ... 67
Triethyl sulphonium sulphate (ROY and RAY) ... 39

PAGE

2 : 3 : 4-Trinitro-dimethylaminobenzene (DATTA and VARMA) 323
2 : 4 : 6-Trinitrophenol (DATTA and VARMA) ... 322

U

Uranyl nitrate, oxidation of leucomalachite green by (GHOSH and MUKHERJEE) 343
Urea, action of, upon semi- and thiosemi-carbazides (GUHA and SEN) 50
Ureas, synthesis of substituted (ROY and RAY) ... 339
Urethane, condensation with butyranilides (DE and RAY) 543-44

V

Valency, variability of (RAY) 89
—of platinum (RAY, BOSE-RAY and ADHIKARI) ... 467
Vasicine (GHOSE) 1
Vasicine, constitution of (DE and RAY) ... 541
Volume, effect of, upon peptisation (MEHROTRA and SEN) 124

W

Wave-length of light, effect upon photochemical oxidation (GHOSH and MUKHERJEE) 351

X

1-Xylyl-2 : 3-benzo-6-thiol-1 : 4 : 5-triazine (GUHA and GHOSH) 568
2-Xylylimino-5-methylthiol-2 : 3-dihydro-1 : 3 : 4-thiodiazole and acetyl derivative (GUHA and GUHA) 168-69
1-Xylyl-2-keto-5-thiol-2 : 3-dihydro-1 : 3 : 4-triazole (GUHA and SEN) 49

PAGE

4-Xylyl thiosemicarbazide (GUHA and GUHA) ... 168
1-Xylyl-2-xylylamino-5-thiol-1 : 3 : 4-triazole (GUHA and SEN) 49

Z

Zinc oxide as a sensitiser in photochemical reaction (BHATTACHARYA and DHAR) 299
Zinc triethyl sulphonium sulphate (RAY and RAY) ... 41